

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,353	03/01/2004	Karl Heinz Kremer	H10514/JDP	9415
1333 PATENT LEG	7590 05/14/2007 AL STAFF	•	EXAMINER	
EASTMAN KODAK COMPANY 343 STATE STREET ROCHESTER, NY 14650-2201			TSUI, WILSON W	
			ART UNIT	PAPER NUMBER
ŕ			2178	
			MAIL DATE	DELIVERY MODE
			05/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)				
	10/790,353	KREMER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Wilson Tsui	2178				
The MAILING DATE of this communication app	ears on the cover sheet with the	correspondence address				
Period for Reply	/ IO OFT TO EVOIDE AMONTH	(C) OD THIDTY (20) DAVC				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status		•				
1) Responsive to communication(s) filed on <u>01 March 2007</u> .						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> 2b)⊠ This action is non-final.					
	) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) <u>1-4,6-10,13-18,24,25,32-35,37-41 and</u> 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-4,6-10,13-18,24,25,32-35,37-41 and</u> 7) ☐ Claim(s) is/are objected to	vn from consideration.	ation.				
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r	•				
10) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on <u>03/01/07</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	_					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4) Interview Summar Paper No(s)/Mail I					
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	5) Notice of Informal 6) Other:					

Application/Control Number: 10/790,353 Page 2

Art Unit: 2178

## **DETAILED ACTION**

1. This action is in response to the RCE filed on: 3/01/2007.

- 2. Claims 1-4, 6-10, 13-17, 24, 25, 32-35, 37-41, and 44 have been amended.

  Claims 1, 17, and 32 are independent claims. Claims 5, 11, 12, 19-23, 26-31, 36, 42,

  43, and 45 are cancelled. Thus claims 1-4, 6-10, 13-18, 24-25, 32-35, 37-41, and 44 are pending.
- 3. The 35 USC 103 rejections have been withdrawn, as necessitated by applicant's amendment, with respect to claims 1, 3-5, 10-13, 17, 19-21, 26-29, 32, 33-36, and 41-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al in further view of CTAN and Hull, claims 2, 18, and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al, CTAN and Hull in further view of Lahey et al, claims 6, 7, 14, 22, 23, 37, and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al, CTAN and Hull in further view of Hansen, claims 8, 9, 24, 25, 39, and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al, CTAN and Hull and Hansen in further view of Altamura et al, claims 15, 16, 30, and 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al, CTAN and Hull in further view of Nakagiri et al and MacLean et al, claim 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al, CTAN, Larson, and Lahey et al.

## **Drawings**

4. The drawings filed on: 3/01/2004 are accepted/approved by the examiner.

Claim Rejections - 35 USC § 103

Art Unit: 2178

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3, 4, 17, 32, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (US Application: US 2003/0167271 A1, published: Sep. 4, 2003, filed: Aug. 28, 2001) in further view of CTAN (Dante, published: October 2002, page 1) and Taylor (US Application: US2001/0033688 A1, published: Oct. 25, 2001, filed: Feb. 2, 2001).

With regards to claim 1, Arnold et al teaches a method comprising:

Generating plural PDF pages (paragraph 0006), corresponding to respective pages to the book (paragraph 0004: whereas, content of the pages can come from a book, and all pages of the book are processed (Abstract: whereas all pages are processed in the RDO file for conversion to PDF)) wherein the PDF pages have content areas of text or graphics or both and non-content areas (Arnold et al, paragraph 0211, claim 18: whereas, the pdf pages contain image data gathered from a RDO file, an also, the pdf pages contain margin data (non-content/white space area) from a RDO file).

However, Arnold et al does not teach a method for removing from all of the PDF pages, the non-content areas to generate plural cropped PDF pages of the content areas on PDF pages, and selecting a feature on the cropped PDF pages common to all of the cropped PDF pages and aligning, in the PDF representation of the book, the selected feature of all cropped PDF pages, and preventing an appearance of page

Art Unit: 2178

jumping between succeeding pages in the PDF representation of the book, by aligning in the PDF representation of the book, the selected feature on all of the cropped PDF pages, whereby when one browses through a number of succeeding pages in the PDF representation of the book they will not appear to jump around from page to page.

CTAN teaches a method for removing from each of the PDF pages the non-content areas to generate cropped PDF pages of the content areas on each of the PDF pages (page 1: whereas, "PDFCROP takes a PDF file as input, calculates the BoundingBox for each page by the help of ghost script, and generates an output PDF file with removed margins" (where the margins are white space/non-content areas that border the content, and all cropped content is saved in a single output PDF file)).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al's PDF generating system, which contains multiple/plurality of pages in a PDF, to further include the ability to crop non-content areas of each PDF page to produce a plurality of cropped pages as taught by CTAN, for all of the pages in the book. The combination of Arnold et al and CTAN would have allowed Arnold et al's PDF generating system to have been able to have produced PDFs that are reduced in size for optimal storage and manipulation purposes.

However, Arnold et al and CTAN do not teach selecting a feature on the cropped PDF pages common to all the cropped PDF pages; and aligning, in the PDF representation of the book, the selected feature of all cropped PDF pages, and preventing an appearance of page jumping between succeeding pages in the PDF representation of the book, the selected feature on all of the cropped PDF pages,

Art Unit: 2178

whereby when one browses through a number of succeeding pages in the PDF representation of the book, they will not appear to jump around from page to page.

Taylor teaches a method *for selecting a feature of* on the pages common to all the pages, *and aligning* the *selected feature of on all the pages* (paragraphs 0046-0048: whereas a feature is selected common to successive pages in a document form (paragraph 0058)).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, and CTAN's PDF modification and generation system to have further included to the ability to align cropped image document data (such as image data in PDF documents) through the method of aligning pages using features that are common from another image, as taught by Taylor, and thus producing a PDF representation of the book, that *prevents an appearance of page jumping* since the all pages are aligned to the same common feature (thus, preventing the pages to appear to jump around from page to page due to alignment). The combination of Arnold et al, CTAN, and Taylor would have allowed Arnold et al's system to have been able to have generated PDF documents that are cropped and aligned through a selected feature that is common among PDF documents such that pages "are accurately registered and oriented" (Taylor, paragraph 0006).

With regards to claim 3, which depends on claim 1, Arnold et al and CTAN similarly teach a method for *the cropped PDF pages*, *and bounding area for each of the pages enclosing content*, such that the cropped page(s) *exclude border space*, as explained in the rejection for claim 1, and is rejected under the same rationale.

Art Unit: 2178

Furthermore, Arnold et al teaches the *PDF pages* generated will *contain image and text content* (paragraph 0017: whereas, the content retrieved from the RDO files to be placed in PDF pages include image (TIFF files) and text data (page numbers)).

Thus, it would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al's PDF generation system to have used CTAN's method for cropping PDF pages and excluding border space, such the cropped pages comprise areas that enclose image and text content. This would have allowed Arnold et al's system to produced cropped PDF pages that contain text and image data.

With regards to claim 4, which depends on claim 1, Arnold et al, CTAN, and Taylor teach a method wherein the non-content areas of the PDF pages have white space that borders around the content areas and which is removed by cropping the PDF pages to generate cropped PDF pages, in claim 1, and is rejected under the same rationale.

With regards to claim 17, Arnold et al, CTAN, and Taylor teach a method comprising:

- Wherein the PDF pages have content areas of text or graphics or both and noncontent areas surrounding content areas, as explained in claim 1, and is rejected under the same rationale.
- Removing the non-content areas on the PDF pages to generate plural cropped
   PDF pages of the content areas on the PDF pages of the book, as explained in claim 1, and is rejected under the same rationale.
- Selecting a feature on the cropped PDF pages common to all of the cropped the PDF pages, as explained in claim 1, and is rejected under the same rationale.

Art Unit: 2178

• Preventing an appearance of page jumping between succeeding pages in the PDF representation of the book by aligning, in the PDF representation of the book, the selected feature on all of the cropped PDF pages, and when one brwoses through a number of succeeding pages in the book the succeeding pages will not appear to jump around from page to page, as explained in claim 1, and is rejected under the same rationale.

Furthermore, Arnold et al teaches a method for:

- Scanning the pages of the book to create PDF pages (paragraphs 0004-0005: whereas, pages from books are scanned into RDO format, and then converted to created PDF pages).
- The PDF representation of the book after the aligning step, as similarly explained in the rejection for claim 1.

However, Arnold et al does not expressly teach *printing* the PDF representation of the book, *after* the aligning step.

Yet, Arnold et al teaches *printing the PDF representation of the book, after* all processing necessary for the final PDF representation of the book, is finished (paragraphs 0010 and 0034: whereas, all processing necessary for the final PDF representation of the book is performed, and a JDF file is used with the PDF format to produce a print job for printing the book).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, and Taylor's method for aligning PDF pages of the book, such that the aligned PDF representation of the book is printed after

Art Unit: 2178

all PDF pre-processing is completed, as also taught by Arnold et al. The combination would have allowed Arnold et al to have analyzed/preprocessed data "describing the arrangement of pages and images on the page in the final document" (Arnold et al, paragraph 0009) and also, "when all the pages have been processed, the final PDF file is self contained and ... sent to an output device" (Arnold et al, paragraph 0010), where the output device includes a printer (Arnold et al, paragraph 0026).

With regards to claim 32, for an apparatus performing a method similar to the method in claim 17, is rejected under the same rationale.

With regards to claim 34, which depends on claim 32, for an apparatus performing a method similar to the method in claim 3, is rejected under the same rationale.

With regards to claim 35, which depends on claim 32, for an apparatus performing a method similar to the method in claim 4, is rejected under the same rationale.

With regards to claim 41, which depends on claim 32, for an apparatus performing a method similar to the method in claim 10, is rejected under the same rationale.

With regards to claim 44, which depends on claim 32, for an apparatus performing a method similar to the method in clam 13, is rejected under the same rationale.

6. Claims 2, 18, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (US Application: US 2003/0167271 A1, published: Sep. 4, 2003, filed: Aug. 28, 2001), CTAN (Dante, published: October 2002, page 1) and Taylor (US Application: US2001/0033688 A1, published: Oct. 25, 2001, filed: Feb. 2, 2001) in further view of Lahey et al (US Patent: 5,999,945, issued: Dec. 7, 1999, filed: Sep 15, 1997).

Art Unit: 2178

With regards to claim 2, Arnold et al, CTAN, and Taylor teach selecting a feature of cropped/segmented content, on each one of the cropped PDF pages as similarly. explained in claim rejection 1, and is rejected under the same rationale. However Arnold et al. CTAN, and Taylor do not teach a method for selecting a corner of the content of the pages.

Lahey et al teaches aligning a set of pages by aligning the corner of content to a particular corner in an output page (FIG 6b, column 8, lines 47-52: whereas a pages are aligned by choosing a corner, such as 'upper left').

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, and Taylor's method for selecting a feature of cropped/segmented content, to further select a corner, for aligning as taught by Lahev et al. The combination of Arnold et al, CTAN, Taylor, and Lahey et al would have allowed Arnold et al's system to have been able to "specify the orientation and placement of a page" (Lahey et al, column 8, lines 49-50) using a specific location (corner) of content for more accurate alignment.

With regards to claim 18, which depends on claim 17, for performing a similar method to claim 2, is rejected under the same rationale.

With regards to claim 33, which depends on claim 32, for an apparatus performing a method similar to the method in claim 2, is rejected under the same rationale.

Claims 6, 7, 14, 37, and 38 are rejected under 35 U.S.C. 103(a) as being 7. unpatentable over Arnold et al (US Application: US 2003/0167271 A1, published: Sep.

Art Unit: 2178

4, 2003, filed: Aug. 28, 2001), CTAN (Dante, published: October 2002, page 1) and

Taylor (US Application: US2001/0033688 A1, published: Oct. 25, 2001, filed: Feb. 2,

2001) in further view of Hansen (US Application: US 2002/0067502 A1, published: Jun.

6, 2002, filed: Dec. 4, 2000).

With regards to claim 6, Arnold et al, CTAN, and Taylor teach generating pages from a book, and performing the alignment step of claim 1, automatically, in claim 1, and is rejected under the same rationale. However, Arnold et al, CTAN, and Taylor do not teach grouping pages from the book into plural subsets.

However, Hansen teaches *grouping pages from the book into plural subsets* (Abstract, paragraph 0016: whereas a group of pages are selected and identified for processing, such that multiple subsets, identified by identifiers are implemented for search and printing).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, and Taylor's PDF alignment system to further include the ability to align only selected groupings of PDF pages as taught by Hansen. The combination of Arnold et al, CTAN, Taylor, and Hansen, would have allowed Arnold et al's system to have the ability to have "grouped the pages or elements destined for a specific printing device" (paragraph 0011) or print-output.

With regards to claim 7, Arnold et al, CTAN, Taylor, and Hansen teach a method each subset as explained in claim 6, and is rejected under the same rationale.

Furthermore, Hansen teaches "any particular page… may belong to more than one group of pages" (paragraph 0038: thus, any page includes pages that are odd or even.

Art Unit: 2178

"Oortion Hamber: 10/750,00

Additionally, since each subset is not restricted to *just* odd page numbers, and *just* even numbers, then Hansen also teaches that *any one subset can also contain odd page numbers and/or even page numbers*).

With regards to claim 14, Arnold et al, CTAN, and Taylor teach generating aligned PDF pages, in claim 1, and is rejected under the same rationale. However, Arnold et al, CTAN, and Taylor do not teach printing the PDF pages after they are aligned.

Hansen teaches a method for *printing PDF pages* (paragraph 0023: whereas, electronic composite documents such as PDFs are printed).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, and Taylor's PDF alignment system to further include the ability to print PDF pages. The combination of Arnold et al, CTAN, Taylor, and Hansen would have allowed Arnold et al's system to have been able to output the PDF pages in printed form.

With regards to claim 37, which depends on claim 32, for an apparatus performing a method similar to the method in claim 6, is rejected under the same rationale.

With regards to claim 38, which depends on claim 37, for an apparatus performing a method similar to the method in claim 7, is rejected under the same rationale.

8. Claims 10, 13, 41, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (US Application: US 2003/0167271 A1, published: Sep.

Art Unit: 2178

4, 2003, filed: Aug. 28, 2001), CTAN (Dante, published: October 2002, page 1), and

Taylor (US Application: US2001/0033688 A1, published: Oct. 25, 2001, filed: Feb. 2,

2001), in further view of Hull (US Patent: 5,832,110, issued: Nov. 3, 1998, filed: May.

28, 1996)

With regards to claim 10, which depends on claim 1, Arnold et al, CTAN, and Taylor teaches a method for *selecting a common feature*, and the cropped PDF pages, in claim 1, and is rejected under the same rationale.

Additionally, Taylor teaches *the feature common to* all the pages (paragraph 0048, 0049: whereas, a feature common to all pages is selected).

However, Taylor does not expressly teach a feature common to all pages is automatically selected.

Hull et al teaches the feature common to all pages is automatically selected (column 1, lines 24-36: automatic selection is accomplished through automatic registration)

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, and Taylor's PDF feature selection and alignment system, to further use a method for automatic selection as also taught by Hull. The combination of Arnold et al, CTAN, Taylor, and Hull, would then have allowed users of Arnold et al's system to have avoided manual alignment which would have been "labor intensive and slow" (Hull, column 1, lines 21-23).

With regards to claim 13, which depends on claim 1, Arnold et al, CTAN, and Taylor similarly teach the cropped PDF pages with the selected feature on all of the cropped

Art Unit: 2178

PDF pages aligned, as explained in the rejection for claim 1, and is rejected under the

same rationale.

However, Arnold et al, CTAN, and Taylor do not expressly teach *displaying* the cropped Pdf pages with the selected feature on all of the cropped PDF pages aligned.

Hull teaches *displaying* the cropped Pdf pages with the selected feature on all of the cropped PDF pages aligned (column 1, lines 15-23: whereas, a user views a display of images and manually moves an image until the common points are displayed as aligned, and thus the pages are displayed as aligned.)

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, and Taylor's system for aligning cropped PDF pages, to further include an implementation to display aligned page data as taught by Hull. The combination would have allowed Arnold et al's system to have allowed "a person to have viewed both images", such that they are aligned accordingly (Hull, column 1, lines 18-20). With regards to claim 41, which depends on claim 32, for an apparatus performing a method similar to the method of claim 10, is rejected under similar rationale.

With regards to claim 44, which depends on claim 32, for an apparatus performing a method similar to the method of claim 13, is rejected under similar rationale.

9. Claims 8, 9, 24, 25, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (US Application: US 2003/0167271 A1, published: Sep. 4, 2003, filed: Aug. 28, 2001), CTAN (Dante, published: October 2002, page 1), and Taylor (US Application: US2001/0033688 A1, published: Oct. 25, 2001, filed: Feb. 2,

Art Unit: 2178

2001), and Hull (US Patent: 5,832,110, issued: Nov. 3, 1998, filed: May. 28, 1996), in further view of Altamura et al (IJDAR, published: November 7, 2000, pages 1-9).

With regards to claim 8, which depends on claim 10, Arnold et al, CTAN, and Taylor teach *the common feature*, as explained in claim 1, and is rejected under the same rationale. However, Arnold et al, CTAN, Taylor, and Hull do not teach the common feature *is a header or footer*.

Altamura et al teaches selecting a common feature in a document by recognizing/selecting a header and footer. whereas, WISDOM++ uses document analysis and recognition technology (P7-3) to recognize document structures including headers (P8-1 and P8-2: whereas, header information and the page number (located inside the header) are selected/located as a common feature in a document, and saved as attribute information).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, Taylor and Hull's PDF alignment of grouped PDF pages, such that groups are formed by using the additional ability to select header information as a common attribute among documents as taught by Altamura et al. The combination of Arnold et al, CTAN, Taylor, Hull, and Altamura et al would have allowed the implementation of document segmentation into classified blocks such that "information on the logical structure of the document" (P8-3) is recognized/selected.

Art Unit: 2178

With regards to claim 9, which depends on claim 10, for a method wherein the common feature is the page number, is similarly explained in claim 8, and is rejected under the same rationale.

With regards to claim 24, which depends on claim 17, for performing a method similar to claim 8, is rejected under the same rationale.

With regards to claim 25, which depends on claim 17, for performing a method similar to claim 9, is rejected under the same rationale.

With regards to claim 39, which depends on claim 32, for an apparatus performing a method similar to the method in claim 8, is rejected under the same rationale.

With regards to claim 40, which depends on claim 32, for an apparatus performing a method similar to the method in claim 9, is rejected under the same rationale.

10. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (US Application: US 2003/0167271 A1, published: Sep. 4, 2003, filed: Aug. 28, 2001), CTAN (Dante, published: October 2002, page 1) and Taylor (US Application: US2001/0033688 A1, published: Oct. 25, 2001, filed: Feb. 2, 2001)in further view of Nakagiri et al (US Patent: 6,616,359 B1, published: Sep. 9, 2003, filed: Nov. 2, 2000) and MacLean et al (US Application: US 2003/0103238 A1, published: Jun. 5, 2003, filed: Nov. 30, 2001).

Art Unit: 2178

With regards to claim 15, which depends on claim 1, Arnold et al, CTAN, and Taylor teach a method for aligning PDF pages to a (location of the) selected feature, in claim 1, and is rejected under the same rationale.

However, Arnold et al, CTAN, and Taylor do not teach selecting one or more groupings/subsets of PDF pages, previewing one of the PDF pages of the selected groupings/subsets, placing a first cursor on a feature of the content of the previewed PDF page to select the feature, and aligning grouped PDF pages.

Nakagiri et al teaches selecting one grouping of pages (Abstract: whereas, a print job is selected which contains a grouping of pages to be printed), and previewing one of the selected pages of the selected grouping (Fig 28: whereas, one of the pages selected in the grouping are displayed in a preview window).

It would have been obvious to one of the ordinary skill in the art to have modified Arnold et al. CTAN, and Taylor's PDF alignment system to further have included the ability to select a group of pages, and previewing one of the pages in a grouping as taught by Nakagiri et al. The combination of Arnold et al, CTAN, Taylor, and Nakagiri et al would have allowed Arnold et al's system to select and preview a group of PDF pages, and to have further "manipulated pages while their previews are displayed and recognizing the correspondence between jobs and pages" (Nakagiri et al, column 1, 55-57).

However, Arnold et al, CTAN, Taylor, Nakagiri et al do not teach placing a first cursor on a feature of the content of the previewed page to select the feature.

Art Unit: 2178

MacLean et al teaches placing a first cursor on a feature of the content of a page to select the feature: whereas, a user marks/annotate/apply-cursor to the content of a document (paragraph 0012: whereas the mark/cursor is used to correlate/align a second document displayed on a screen by locating the feature indicated by the mark/cursor in a second document), and furthermore the document is scanned and converted to a PDF (paragraph 0055, Fig 4, reference number 50).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Arnold et al, CTAN, Taylor, and Nakagiri et al's system for previewing a group of aligned PDF pages, to further include the ability to apply a cursor or mark to a PDF document as taught by MacLean et al, such that the cursor/mark is applied to one of the previewed PDF pages. The combination would have allowed a "correlation step by identifying at least one alignment point on the document" (MacLean et al, paragraph 0012).

With regards to claim 16, which depends on claim 15, Arnold et al, CTAN, and Taylor teach *moving the content area of the displayed* image to manually *align* the feature in one image to the common feature in a second image, as taught in claim 13, and is rejected under the same rationale.

Arnold et al, CTAN, Taylor, Nakagiri et al, and MacLean teach:

- Previewing other PDF pages of the groupings, as explained in claim 15, and is rejected under the same rationale.
- Applying a cursor on a feature of a first previewed PDF page, in claim 15, and is rejected under the same rationale.

Art Unit: 2178

However, Arnold et al, CTAN, Taylor, Nakagiri, and MacLean do not teach applying a second cursor to on a feature in the other previewed pages.

Yet, it would have been obvious to one of the ordinary skill in the art at the time to the invention to have used Arnold et al, CTN, Taylor, Nakagiri et al, and MacLean's method for applying a cursor to a feature on a first preview page, to also use the same method to apply a cursor to other PDF pages in the groupings. The combination would thus have allowed users of Arnold et al's system to have been able to create alignment points for all pages in a group, such that the second cursor would have been aligned with the first cursor using the method of manual image alignment/registration, as explained earlier in this claim.

## Response to Arguments

Applicant's arguments with respect to claims 1-4, 6-10, 13-18, 24-25, 32-35, 37-11. 41, and 44, have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wilson Tsui whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

5/07/07

Wilson Tsui

Patent Examiner

Art Unit: 2178 May 7, 2007

CESAR PAULA
PRIMARY EXAMINER